

FIGURE 1

For Patent Purposes:	<u>John Doe</u>
Date:	<u>Dec. 22/03</u>
Signature:	<u>John Doe</u>
Signature:	<u>John Doe</u>

NOVEMBER 2003

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DRILL PIPE ROLLING FROM THE PIPE TUB TO THE "PIPE LAUNCHER"

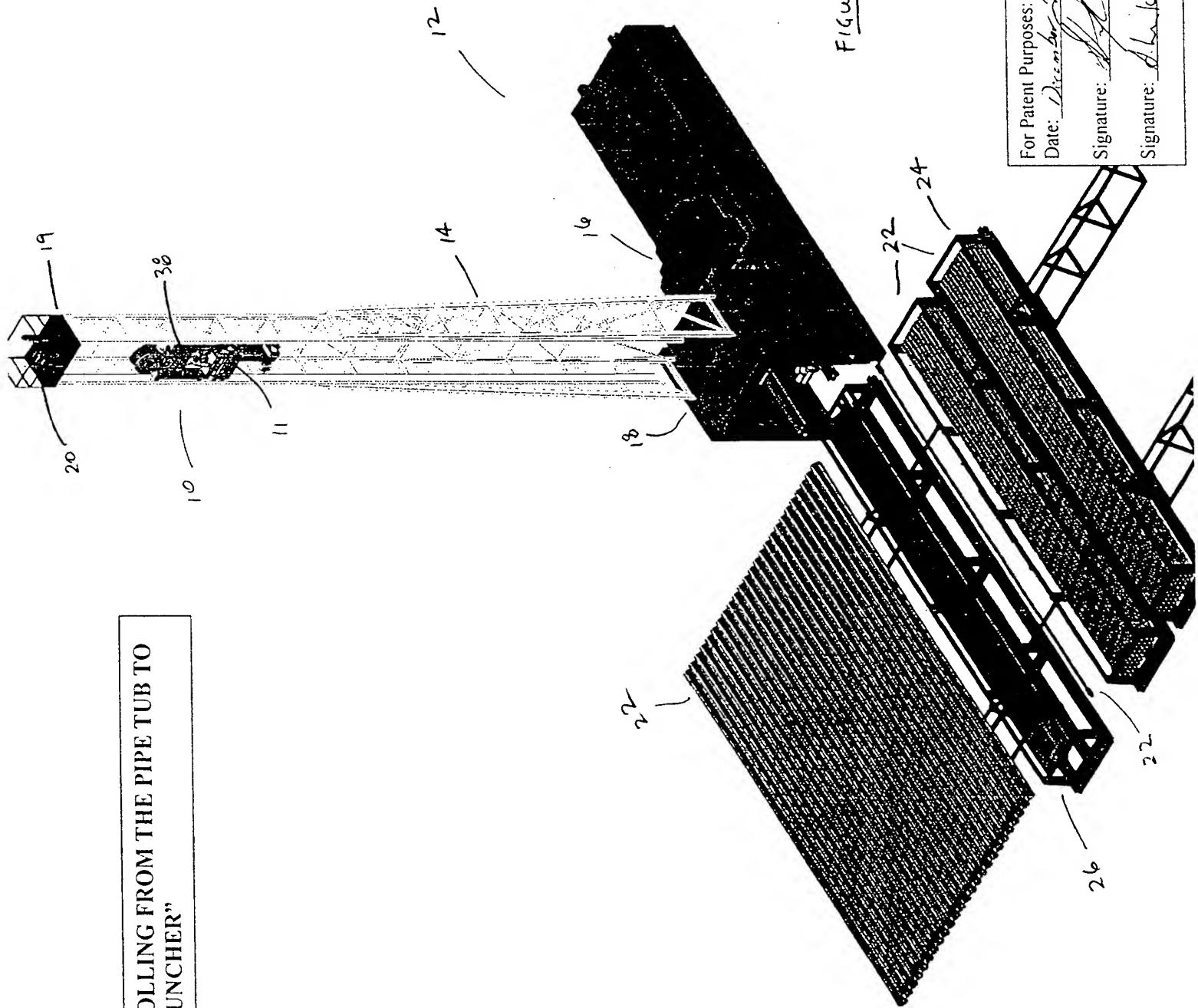


FIGURE 2

For Patient Purposes:
Date: 12/20/04

For Patent Filings.

Signature: John Doe

Signature: John Schatz

For Patent Purposes:	_____
Date:	Dec. 22/03
Signature:	<u>D.L. D.C.</u>
Signature:	<u>M</u>

PIPE IN LAUNCHER READY FOR ALIGNMENT
TO DESCENDING ARTICULATING TOP DRIVE



PIPE ALIGNMENT READY FOR PIPE LAUNCHER
TO POSITION PIPE IN TARGET ZONE

For Patent Purposes:
Date: DEC 22/03
Signature: A. L. Hulse
Signature:

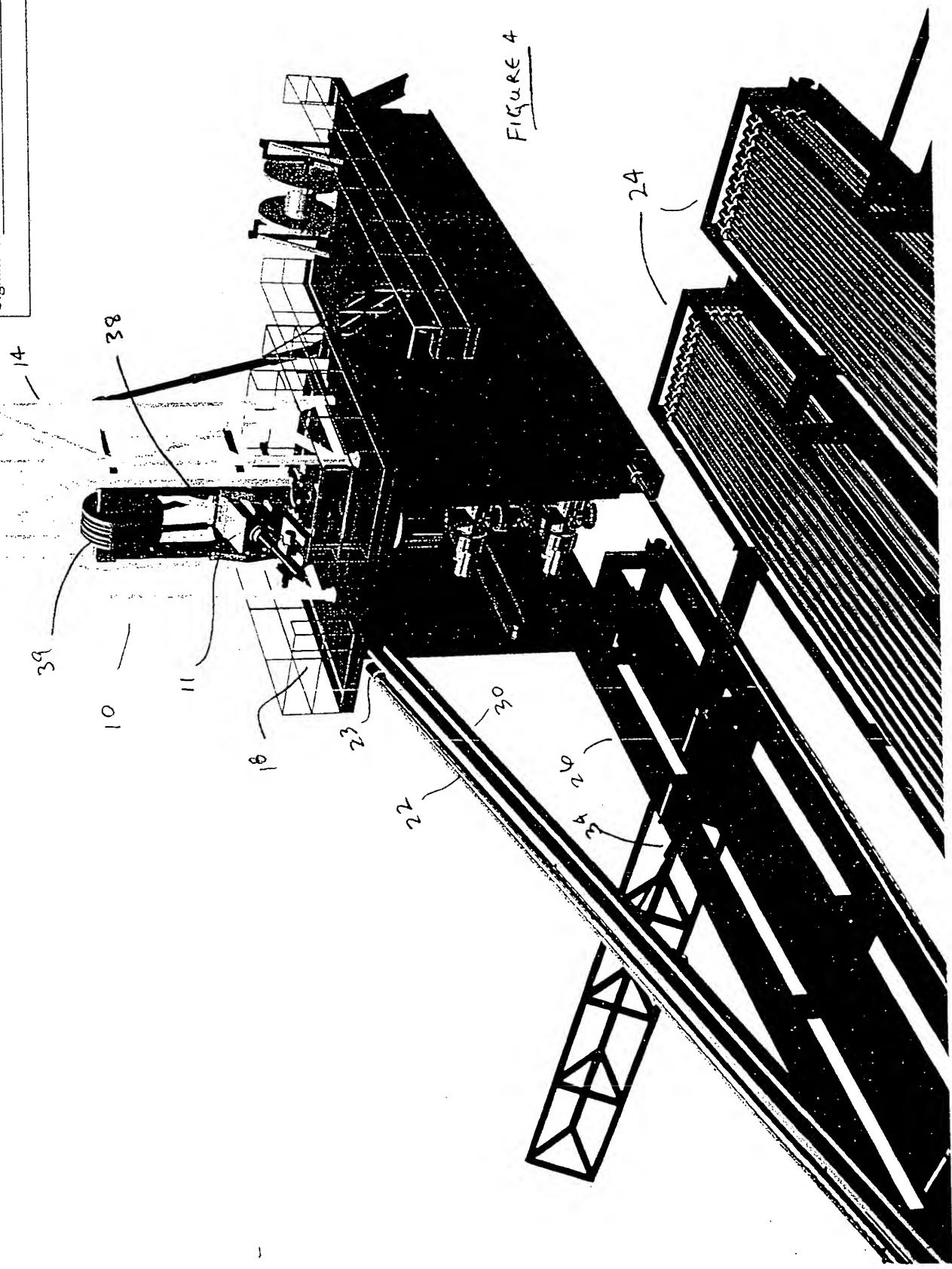


FIGURE 4

PIPE LAUNCHERS RAM PUSHING PIPE UPWARD INTO THE TARGET ZONE

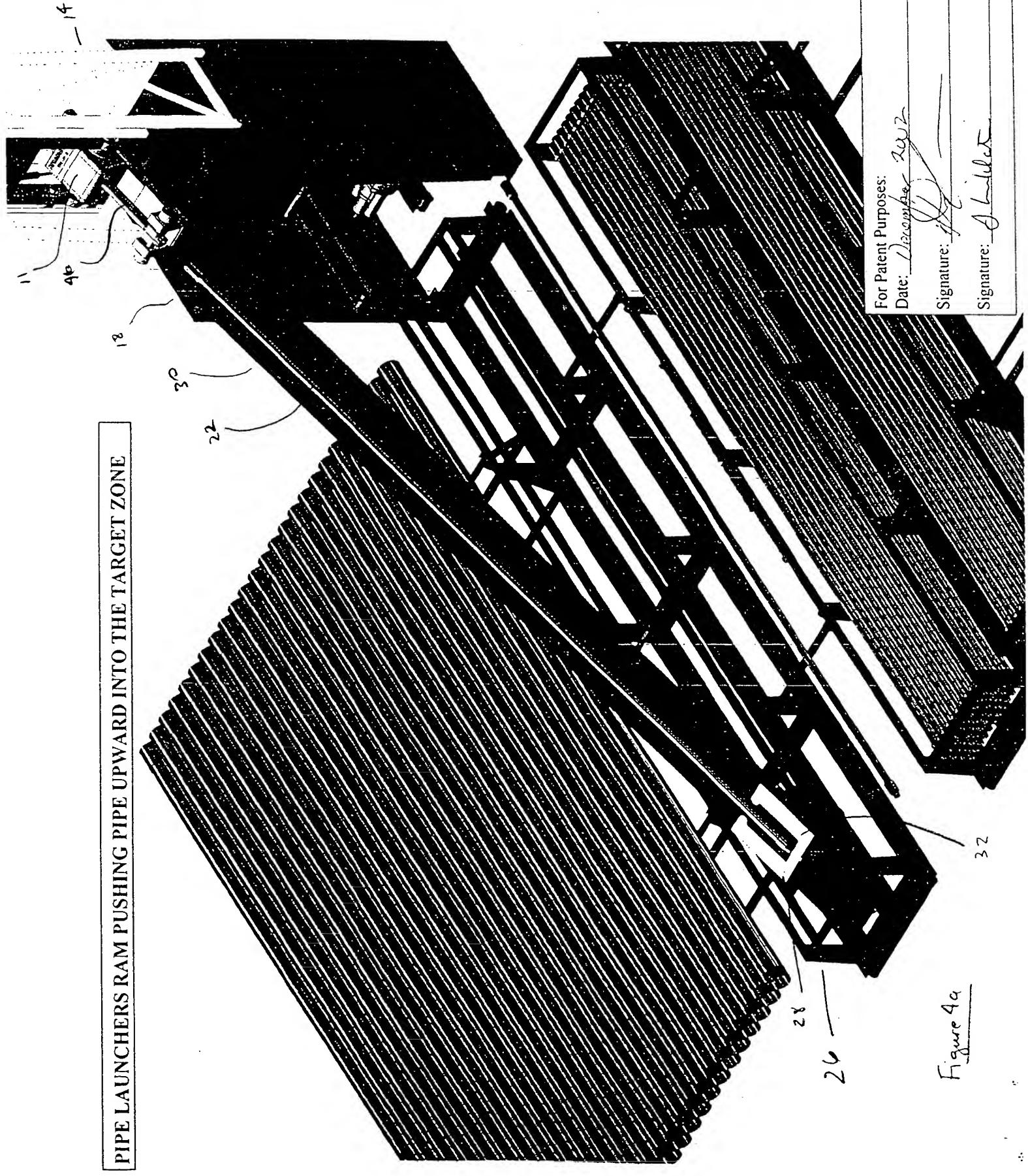
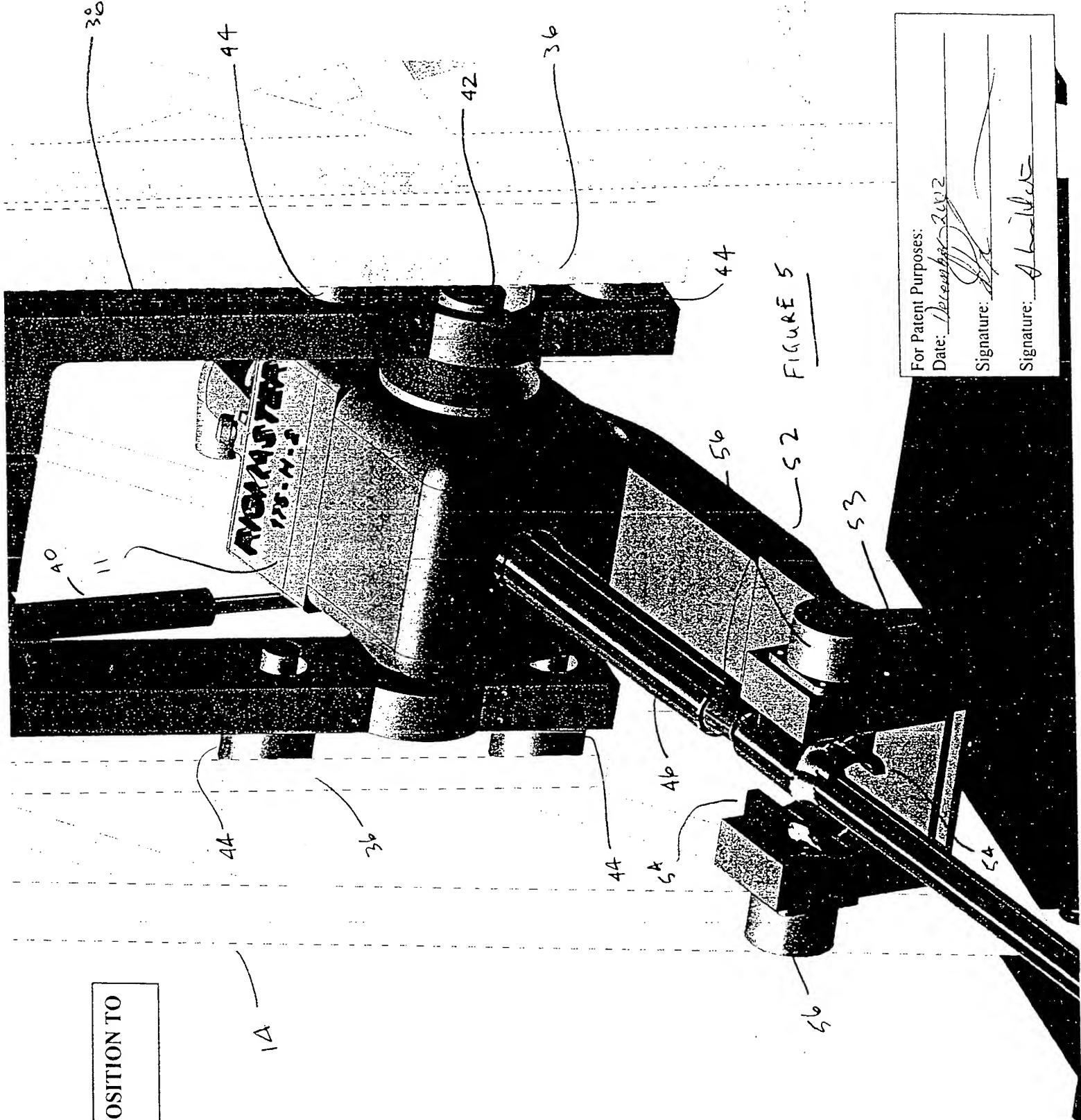


Figure 4a

For Patent Purposes:	<u>John</u>
Date:	<u>December 2002</u>
Signature:	<u>John</u>
Signature:	<u>Bill</u>



TOP DRIVE IN POSITION TO GRIP TUBULAR

FIGURE 5

- 52

35

For Patent Purposes:
Date: December 2002
Signature: 
Signature: 



GRIPPER IN ACTION, CLAMPED TO
TOOL JOINT, READY TO SLIDE UPWARD
TO MEET THE SLOWLY ROTATING TOP
DRIVE QUILL

FIGURE 6 22 —

For Patent Purposes:
Date: Dec. 22/03

Signature: John Miller

Signature: _____

CONNECTION COMPLETED, GRIPPER
REMAINS LOCKED ON FOR HOISTING



FIGURE 7

For Patent Purposes:
Date: DEC 23/03

Signature: Blank

Signature: MC

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GOING UP, DRAGGING THE PIPE WITH
THE TOP DRIVE ARTICULATING RAMS
SET TO THE FLOAT POSITION



14

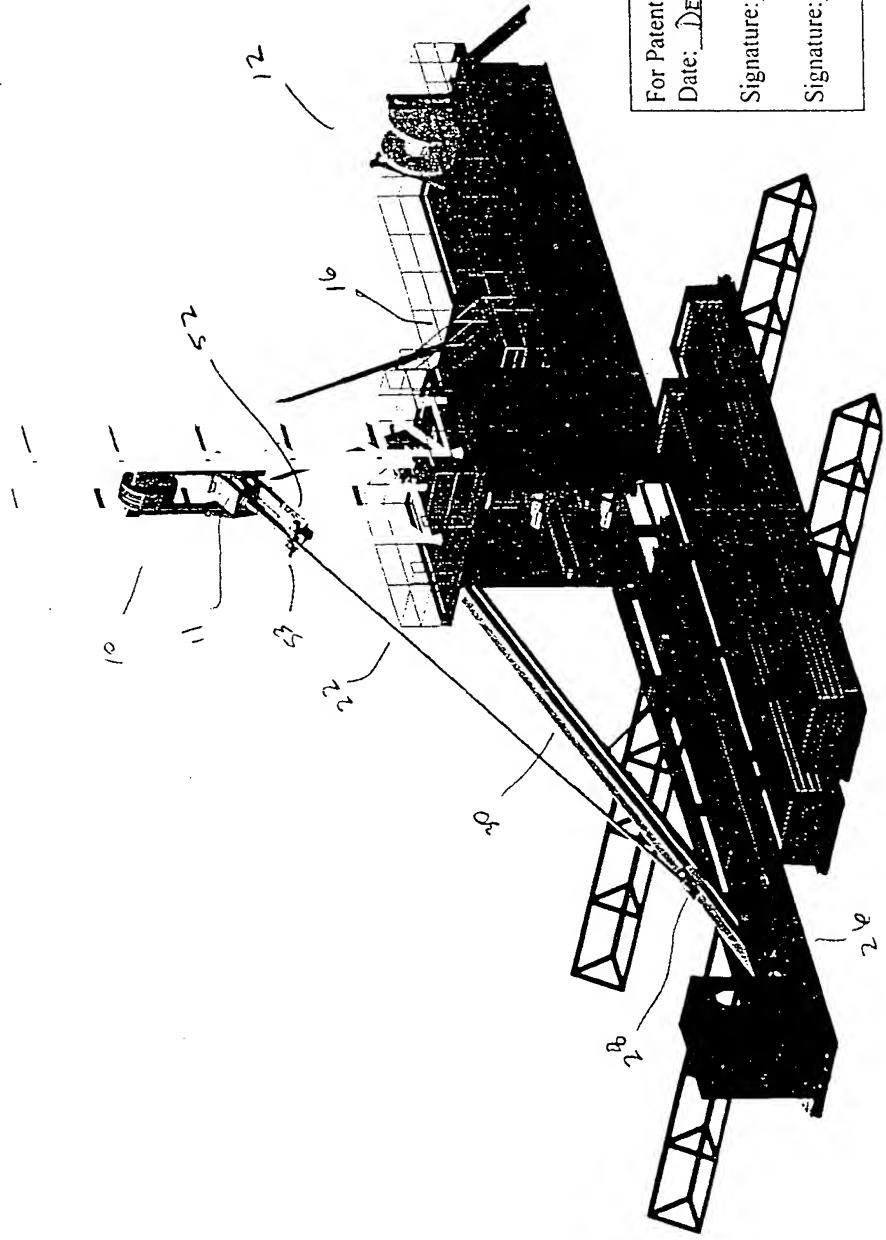


FIGURE 8

For Patent Purposes:	<input type="text"/>
Date:	DEC. 22/63
Signature:	<u>A. L. D.</u>
Signature:	<u>m</u>

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DRILL PIPE READY TO BREAK FREE OF THE DOLLY AND SWING
GENTLY INTO THE VERTICAL POSITION

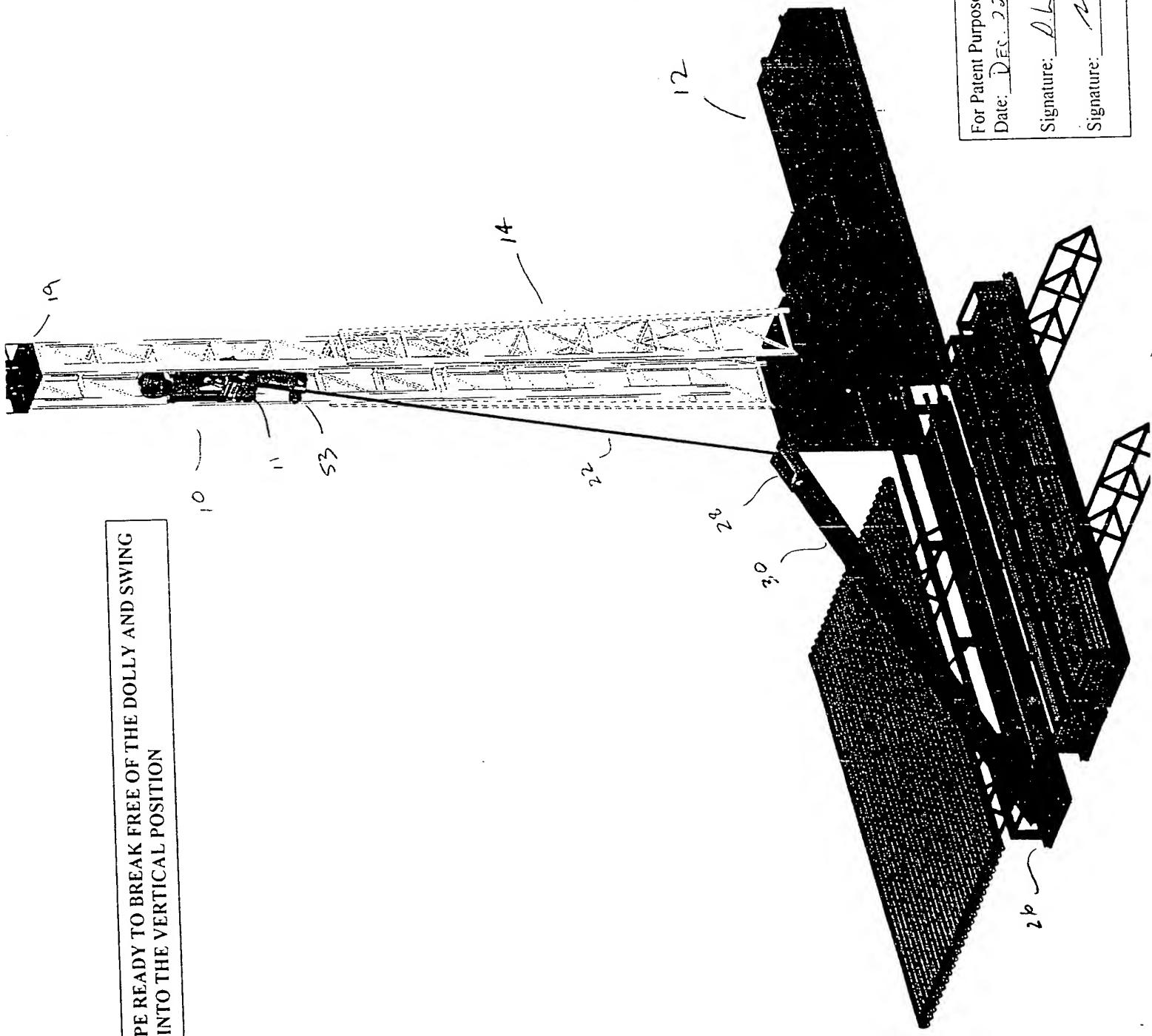


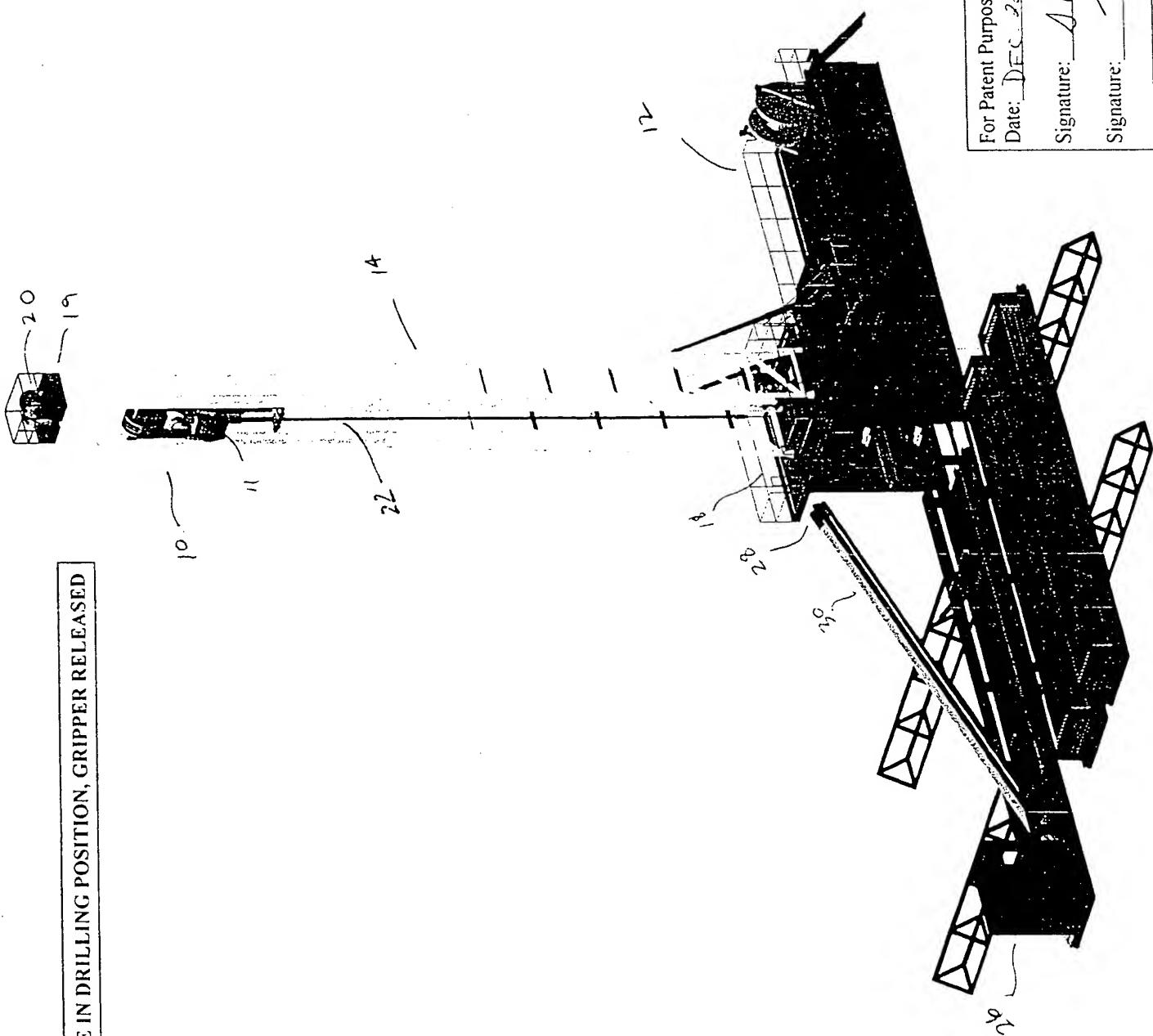
FIGURE 9

For Patent Purposes:
Date: DEC. 22/63

Signature: D. L. Dillat

Signature: Mr

DRILL PIPE IN DRILLING POSITION, GRIPPER RELEASED



For Patient Purposes:
Date: DEC 22/03 _____
Signature: Alfred _____
Signature: er _____

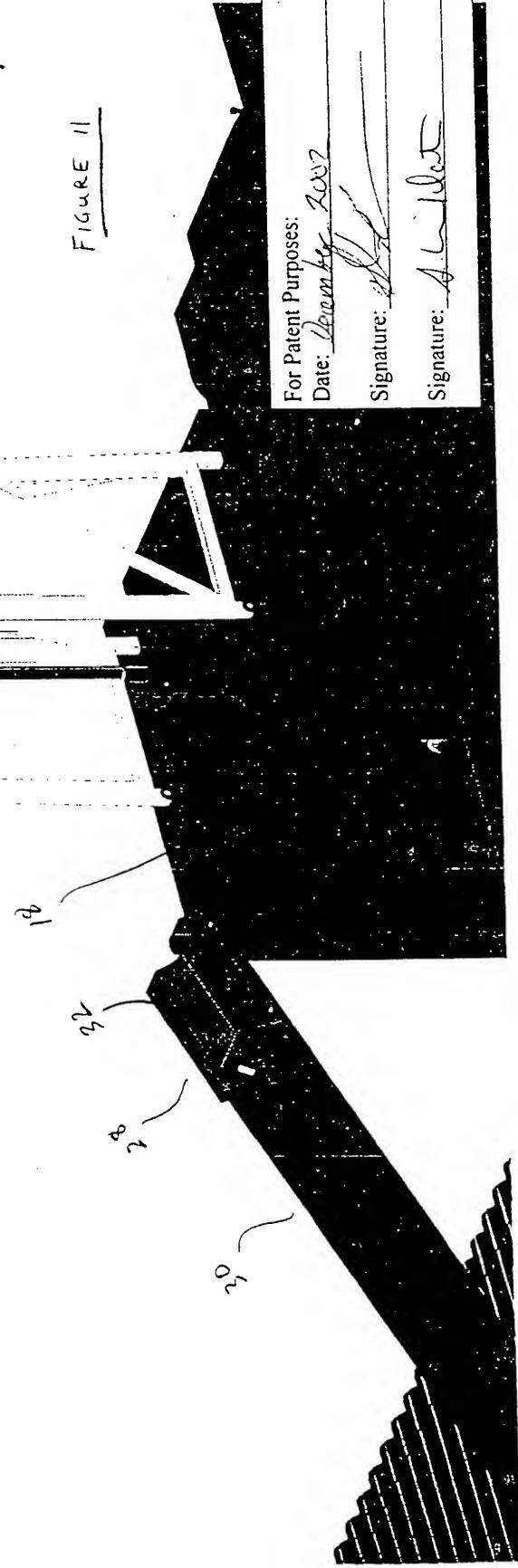
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COMING OUT OF THE HOLE TO LAY DOWN, OR
TRIP

22

14

FIGURE II



For Patient Purposes:	<i>Denmark 2007</i>
Date:	<i>1/22/07</i>
Signature:	<i>[Signature]</i>
Signature:	<i>[Signature]</i>

TOP DRIVE ARTICULATING SLIGHTLY TO ALLOW TAGGING
OF CART IN PREPARING TO LAY PIPE DOWN

For Patent Purposes:	Date: DEC 23/03
Signature: <u>Al L. Lutz</u>	
Signature: <u>RL</u>	

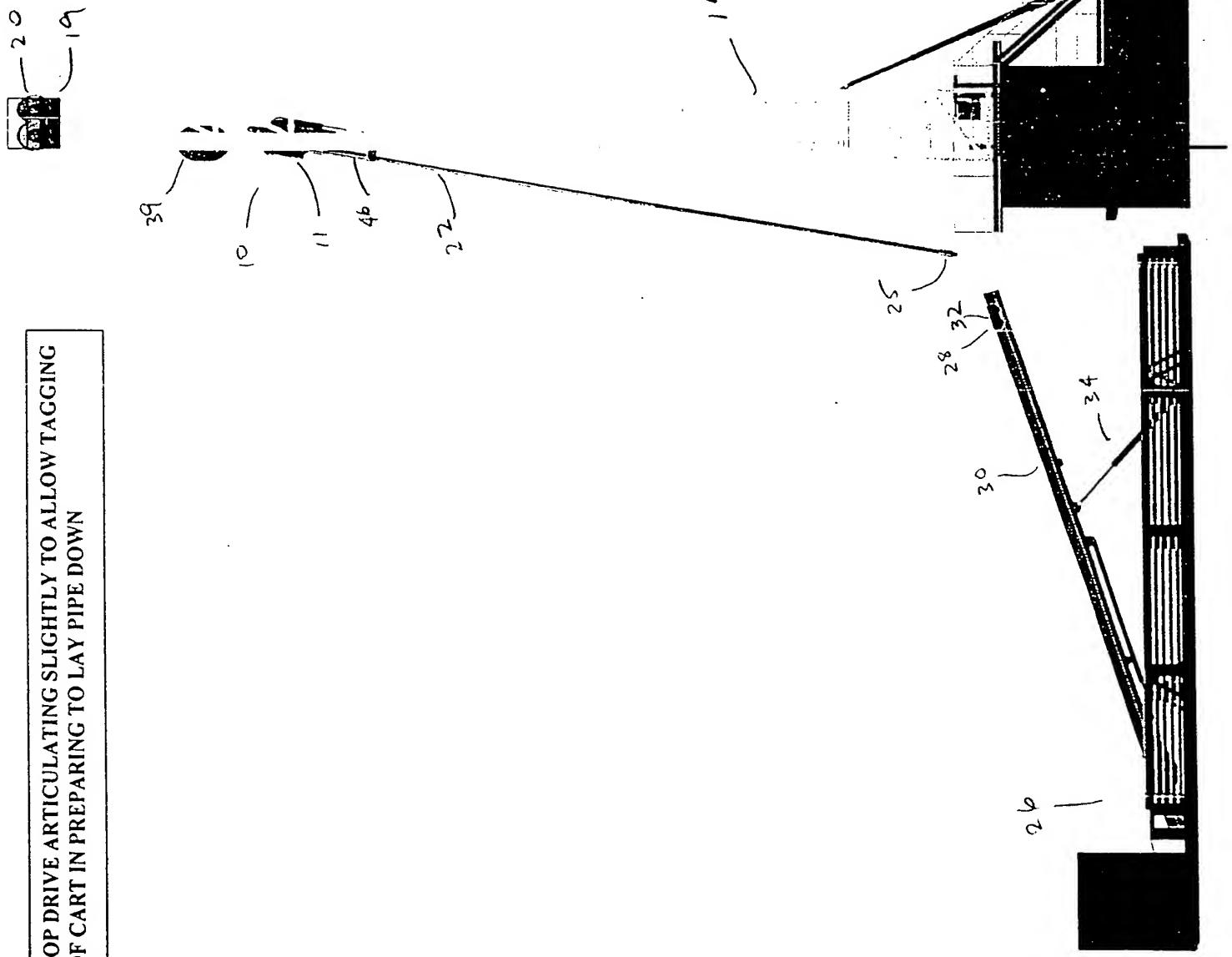


FIGURE 12

TOP DRIVE ARTICULATED TO SWING PIPE ONTO
THE DOLLY

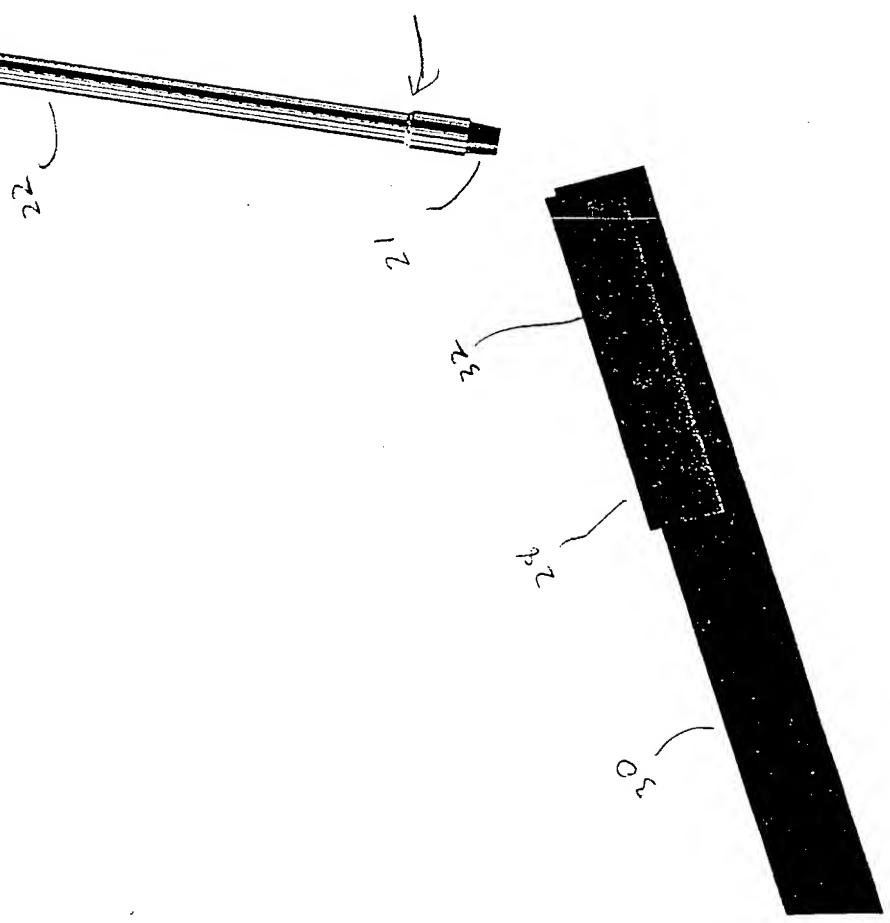
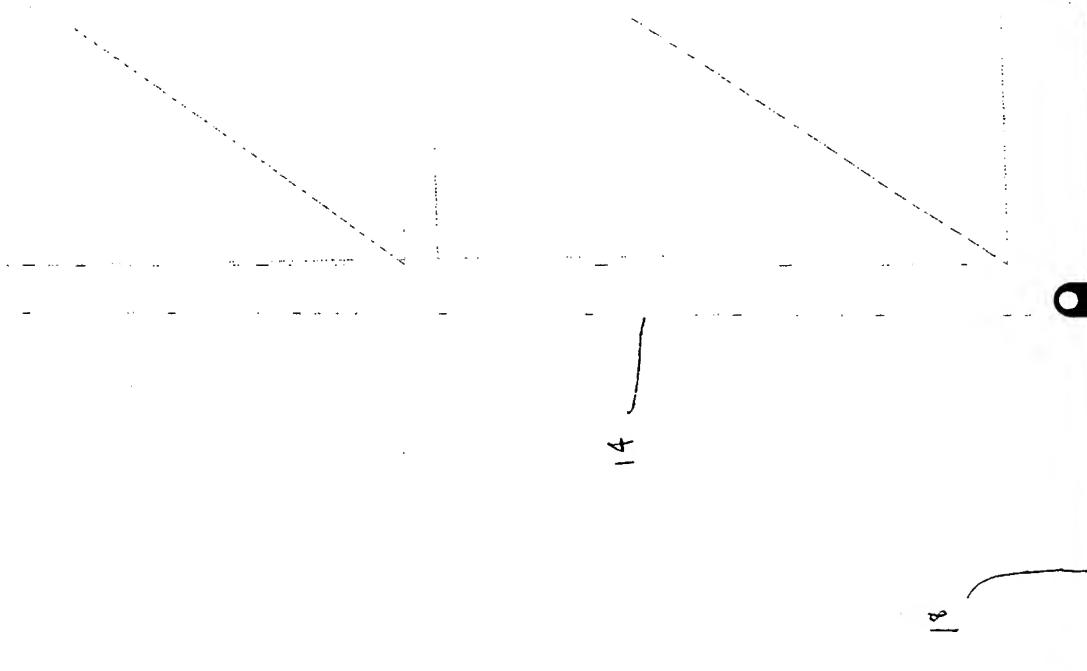


FIGURE 13

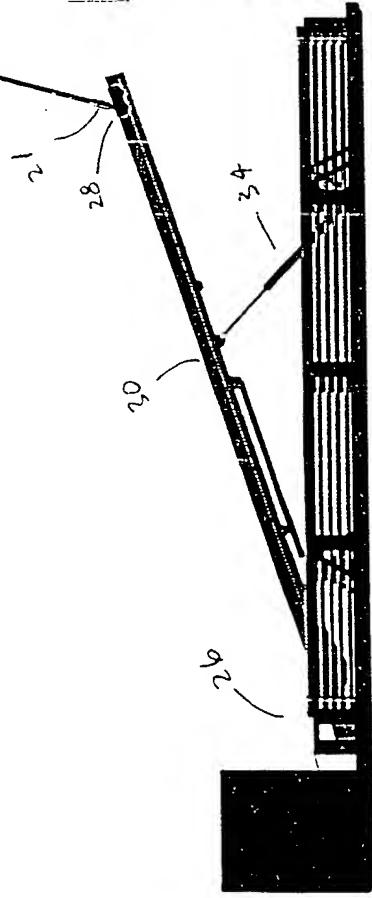
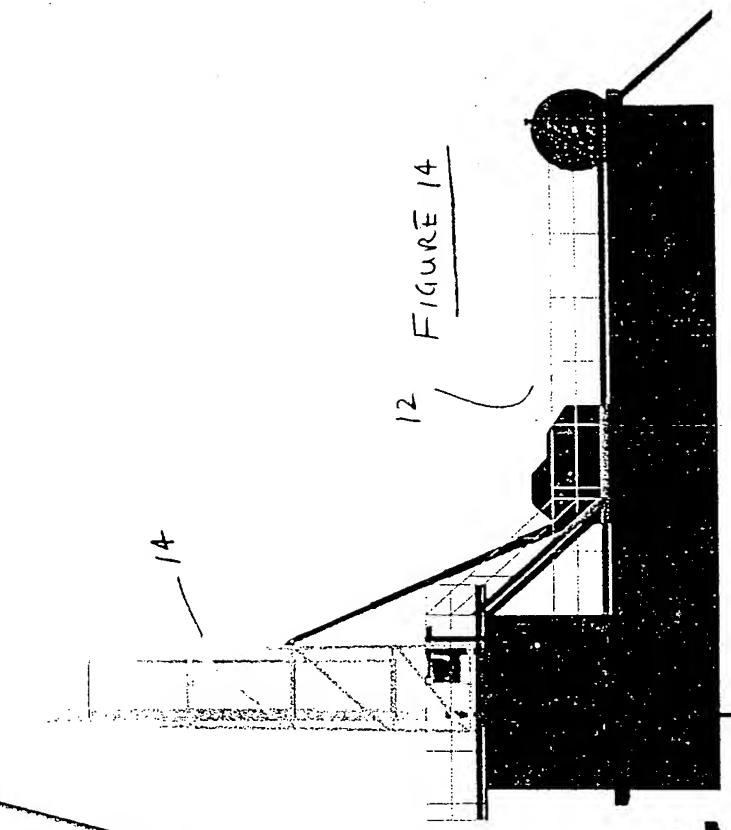
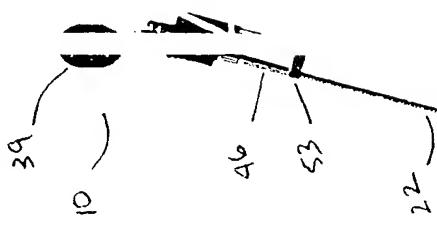


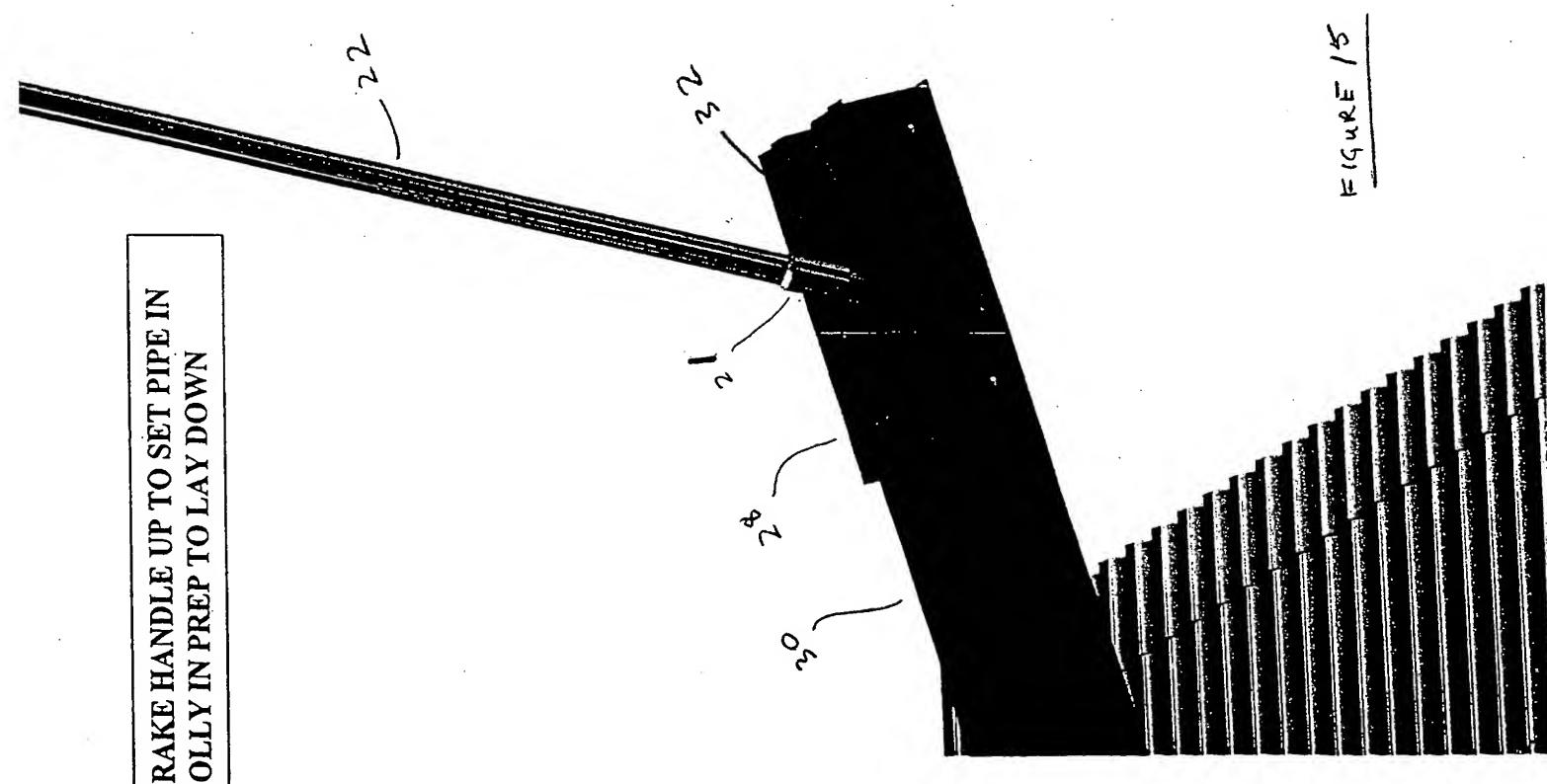
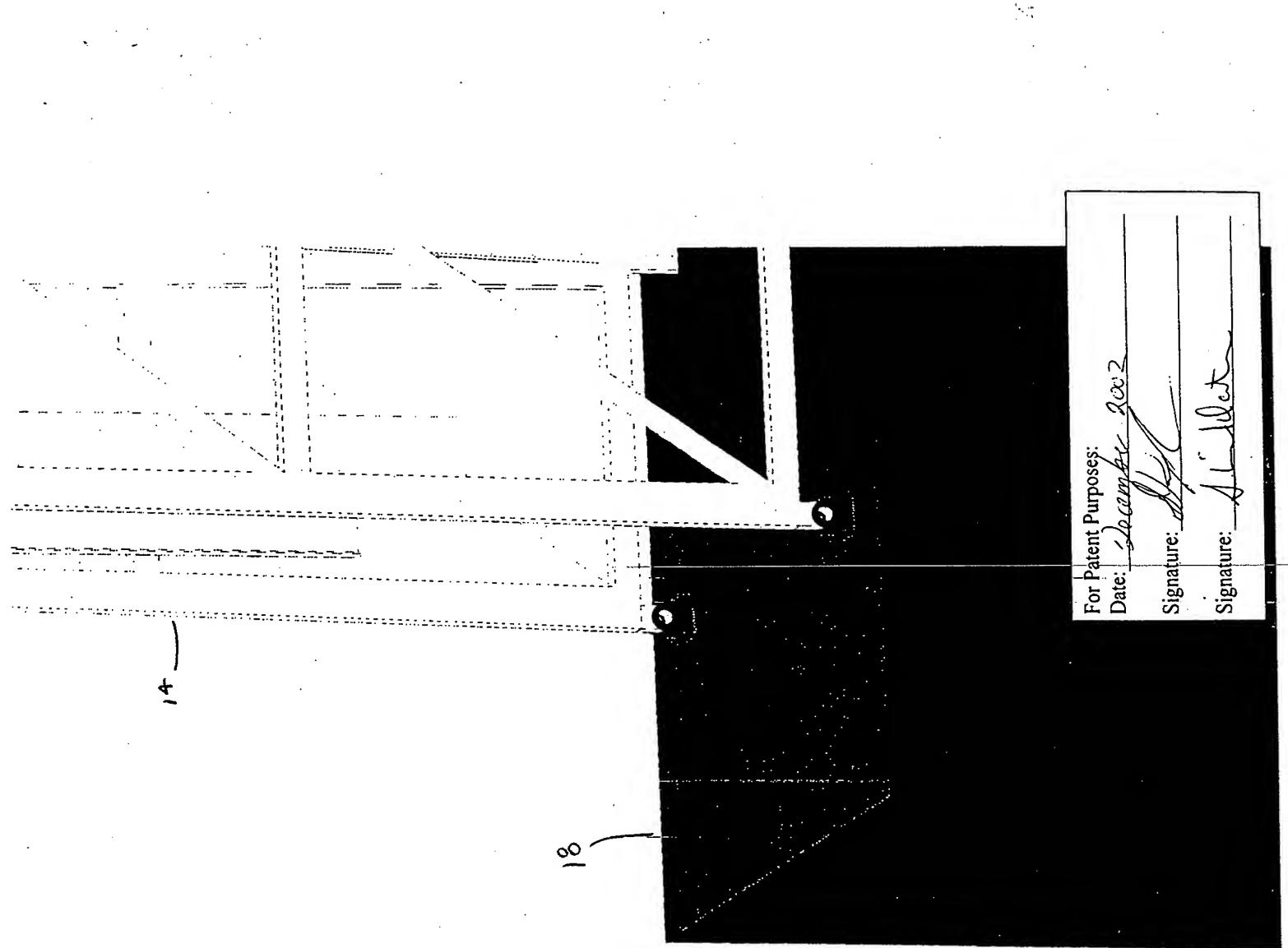
For Patent Purposes:	<u>December 2002</u>
Date:	<u>12/10/02</u>
Signature:	<u>John Doe</u>
Signature:	<u>John Doe</u>



ARTICULATING RAMS ON TOP DRIVE IN
FLOAT POSITION, DRAWWORKS BRAKE
HANDLE RAISED ALLOWING PIPE AND
TOP DRIVE ASSEMBLY TO DESCEND TO
LAUNCHER ANGLE

For Patent Purposes:	_____
Date:	Dec. 22/03
Signature:	<u>D. Wilder</u>
Signature:	<u>m</u>





BRAKE HANDLE UP TO SET PIPE IN
DOLLY IN PREP TO LAY DOWN

PIPE DESCENDING...

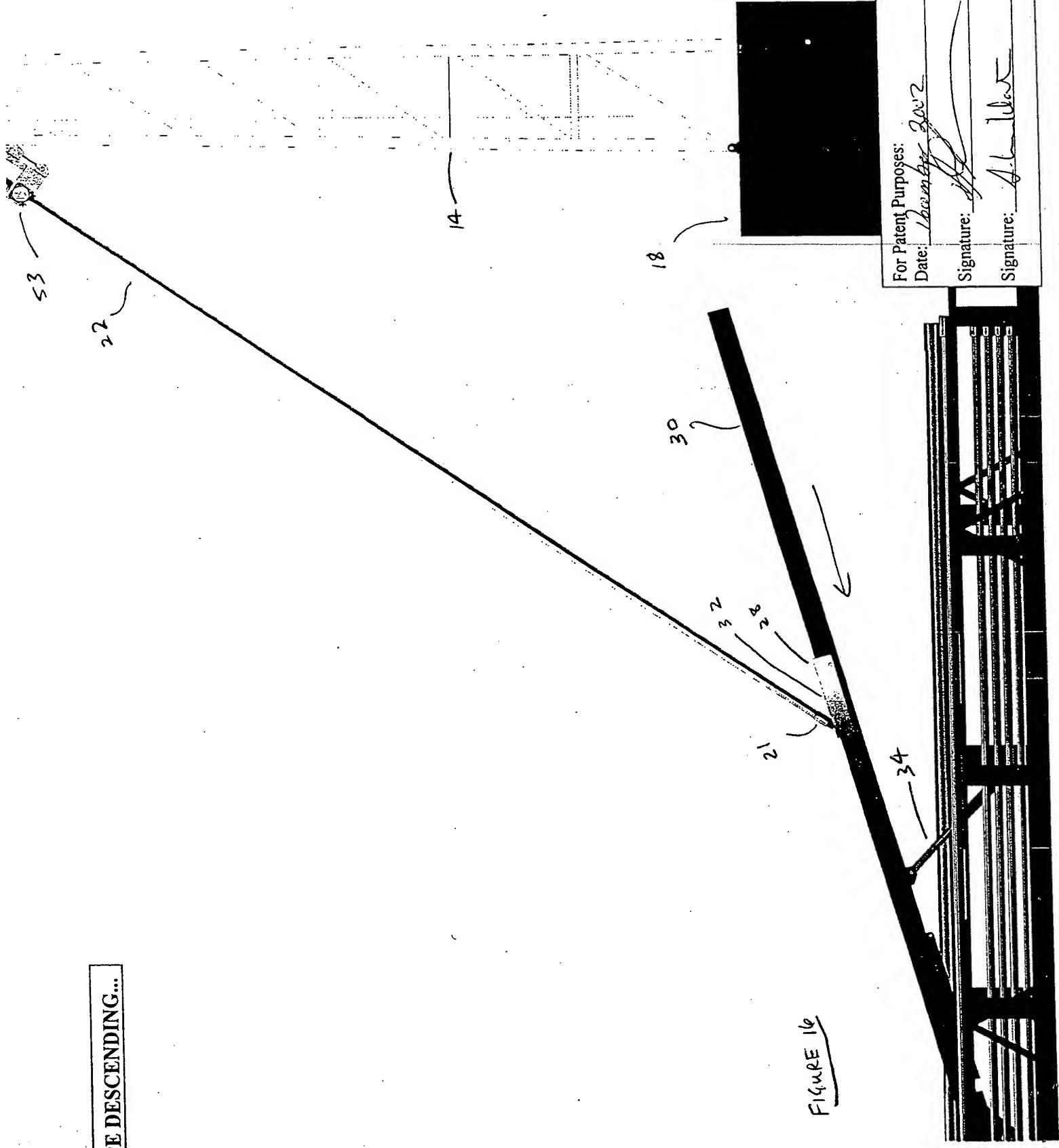
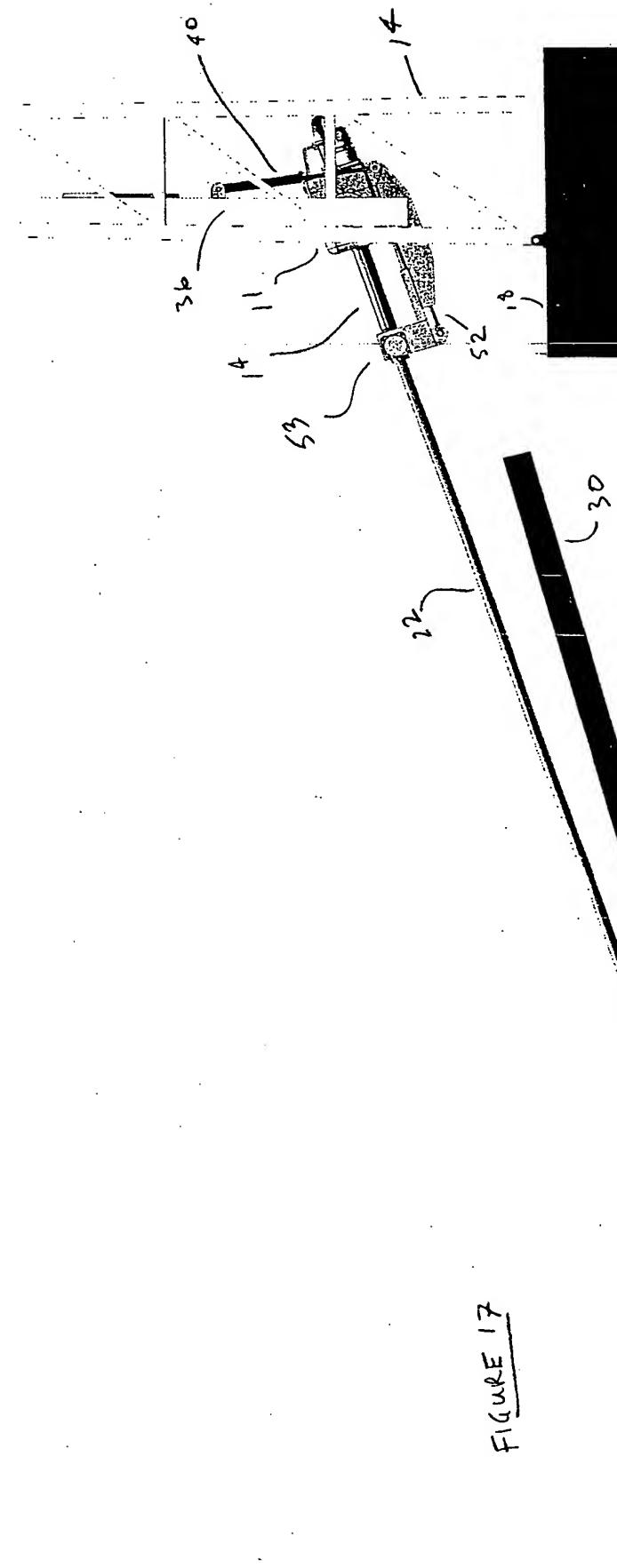


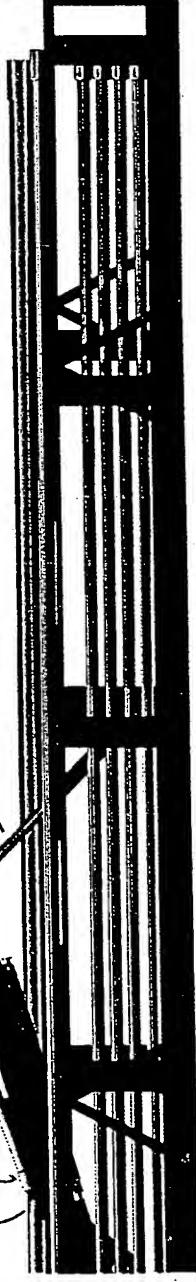
FIGURE 16

For Patent Purposes:	<i>John Doe</i>
Date:	<i>10/10/02</i>
Signature:	<i>John Doe</i>
Signature:	<i>John Doe</i>

PIPE BEING LOWERED ONTO PIPE LAUNCHER THROUH FOR
PLACEMENT BACK INTO TUBS OR RACKS



For Patent Purposes:	<u>John Doe</u>
Date:	<u>January 2002</u>
Signature:	<u>John Doe</u>
Signature:	<u>John Doe</u>



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